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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,049	01/23/2002	Markus Noller	16787-2	5241

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EXAMINER	
LEYSON, JOSEPH S	

ART UNIT	PAPER NUMBER
1722	9

DATE MAILED: 07/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/055,049	Applicant(s) NOLLER ET AL.	
	Examiner Joseph Leyson	Art Unit 1722	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 January 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *5* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
(e) BACKGROUND OF THE INVENTION.
(1) Field of the Invention.
(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(f) BRIEF SUMMARY OF THE INVENTION.
(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(h) DETAILED DESCRIPTION OF THE INVENTION.
(i) CLAIM OR CLAIMS (commencing on a separate sheet).
(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

2. The disclosure (i.e., pp. 1 and 3) should not refer to specific claim numbers because claim numbering and content can change during prosecution thereof.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Harris(-589).

Harris(-589) teaches a device, that corresponds to the instant device, for extruding plastic compounds, having at least one feed instrument 14 for feeding a compound through a channel 12 to a die 27, a sensing instrument 34, 35 being provided at the channel or at the die in order to determine at least one measured variable related to the viscosity of the compound, the feed instrument 14 and the die 27 being configured in such a way that the feed instrument 14 has a delivery pressure which oscillates over time at a frequency, and the die 27 has a flow resistance controlled by a gear pump 24 which oscillates at the same frequency in order to maintain the compound viscosity (col. 10, line 34, to col. 11, line 18). The measured variable is the

pressure of the compound (col. 7, lines 4-7). The sensing instrument is operatively coupled to a control instrument 36. The control instrument 36 is capable of controlling the feed instrument 14, as a function of at least one measured value determined by the sensing instrument, in such a way that the exit velocity of the compound from the die fluctuates minimally, i.e., by maintaining viscosity.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35

U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harris(-589) in view of Balk(-079).

Harris(-589) discloses the apparatus substantially as claimed except for the measured variable being the flow rate of the compound.

Balk(-079) discloses an extrusion apparatus including a flow rate detector 13 for regulating a feed instrument 11 providing a compound to a die 1.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the measured variable of Harris(-589) to be the flow rate of the compound because such a measured flow rate would provide an alternative variable for controlling the feed instrument as disclosed by Balk(-079).

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harris(-589) in view of Straumanis(-078).

Harris(-589) discloses the apparatus substantially as claimed except for the device including a transport instrument for removing the compound extruded from the die, the control instrument being capable of controlling the transport instrument, as a function of at least one measured value

determined by the sensing instrument, in such a way that the transport velocity of the transport instrument corresponds to the exit velocity of the compound from the die.

Straumanis(-078) discloses an extrusion device which includes a transport instrument 15 for removing a compound extruded from a die 16. A sensing instrument for sensing head pressure is operatively coupled to a control instrument 31. The control instrument 31 is capable of controlling the transport instrument 15, as a function of at least one measured value, i.e., head pressure, determined by the sensing instrument, in such a way that the transport velocity of the transport instrument corresponds to the exit velocity of the compound from the die, i.e., to maintain the thickness of the extrudate (col. 4, line 56, to col. 12, line 11).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the apparatus of Harris(-589) with a transport instrument and to make the control instrument capable of controlling the transport instrument, as a function of at least one measured value determined by the sensing instrument, in such a way that the transport velocity of the transport instrument corresponds to the exit velocity of the compound from the die, because such a

modification would provide enable the product to be removed with a uniform thickness as disclosed by Straumanis(-078).

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harris(-589) in view of Abe(-830).

Harris(-589) discloses the apparatus substantially as claimed except for the device including a rotary instrument having at least one rotatable die, the control instrument being capable of controlling the rotary instrument, as a function of at least one measured value determined by the sensing instrument, in such a way that the exit velocity of the compound from the die fluctuates minimally.

Abe(-830) disclose an extrusion device including a rotary instrument having at least one rotatable die 9. A sensing instrument 13 is operatively coupled to a control instrument 15. The control instrument 15 is capable of controlling the rotary instrument 9, as a function of at least one measured value determined by the sensing instrument 13, in such a way that the exit velocity of the compound from the die fluctuates minimally, i.e., for uniform product shape (col. 1, lines 10-22; col. 4, line 1, to col. 8, line 3).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the device of Harris(-589) to include a rotary instrument having at least one

rotatable die, the control instrument being capable of controlling the rotary instrument, as a function of at least one measured value determined by the sensing instrument, in such a way that the exit velocity of the compound from the die fluctuates minimally, because such a modification is known in the extrusion art as disclosed by Abe(-830) and would provide a uniform shaped product.

10. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris(-589) in view of LaSpisa(-246).

Harris(-589) discloses the apparatus substantially as claimed except for the feed instrument being connected through a plurality of channels to a die having a plurality of outlet openings.

LaSpisa(-246) discloses a feed instrument being connected through a plurality of channels to a die having a plurality of outlet openings in order to make multiple products.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the feed instrument of Harris(-589) to be connected through a plurality of channels to a die having a plurality of outlet openings because such a modification would enable multiple products to be produced, as disclosed by LaSpisa(-246).

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Theysohn(-056), Lee et al.(-289), Twist et al.(-930) and Altvater et al.(-233) are cited as of interest.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Leyson whose telephone number is (703) 308-2647. The examiner can normally be reached on M-F(8:30-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (703) 308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

jl
June 29, 2003

JAMES P. MACKEY
PRIMARY EXAMINER
6/29/03